

WHAT IS CLAIMED IS:

1. An information reproduction apparatus comprising:
 - a reading device for reading information recorded in an information storage medium;
 - a decoding device for decoding information read by the reading device;
 - a storage device for holding decoded information decoded by the decoding device so that the decoded information can be read therefrom and written therein repeatedly;
 - an output controlling device for sequentially reading out and outputting information in order of precedence at the time of writing the decoded information while writing the decoded information in a predetermined region of the storage device;
 - a designating device for designating a repetitive reproduction start position;
 - a repetitive reproduction controlling device for controlling a repetitive reproduction processing;
 - a repetitive start instructing device for instructing the repetitive reproduction controlling device to begin to perform repetitive reproduction; and
 - a repetition reproduction range setting device for setting a repetition reproduction range that would include the decoded information to be reproduced at one repetition reproduction and instructing the output controlling device to maintain the decoded information in the repetition reproduction range, when the start position of repetitive reproduction is

designated by the designating device,

wherein the repetitive reproduction controlling device instructs the output controlling device to output the decoded information in the repetition reproduction range and acquire the decoded information subsequent to the repetition reproduction range, when the repetitive reproduction controlling device is instructed to begin to perform the repetitive reproduction by the repetitive reproduction start instructing device.

2. The information reproduction apparatus according to claim 1, wherein:

the repetition reproduction range setting device sets a range from a target position on the storage device, from which the decoded information is read at the time when the start position is designated, as the repetition reproduction range, and instructs the output controlling device to use an area except the repetition reproduction range for reading and writing area of the decoded information, when the repetitive reproduction start position is designated, and

the repetitive reproduction controlling device instructs the output controlling device to begin to read out the decoded information from the target position on the storage device to an end of the repetition reproduction range when the repetitive reproduction controlling device is instructed to begin to perform the repetitive reproduction, and instructs the reading device to read the information, the decoding device to decode

the read information, and the output controlling device to write the decoded information in the area except the repetition reproduction range, when the output controlling device is instructed to acquire the decoded information subsequent to the repetition reproduction range.

3. The information reproduction apparatus according to claim 1, wherein the repetitive reproduction range setting device sets the size of the repetition reproduction range so that both reading information corresponding to the decoded information subsequent to the repetition reproduction range in the reading device and decoding the read information in the decoding device can be completed while the decoded information in the repetition reproduction range is outputted.

4. The information reproduction apparatus according to claim 1, wherein:

the information recorded on the information storage medium is video compression information that includes first image information for intra-frame encoding and second image information for performing forward and backward prediction; and

the repetition reproduction range setting device instructs the output controlling device to maintain both the decoded information that corresponds to one processing unit of the video compression information and the decoded information that corresponds to the second image information immediately before the first image information that is first appeared in

a processing unit subsequent to the one processing unit, as decoded information in the repetition reproduction range.

5. An information reproduction method comprising the processes of:

- reading information recorded in an information storage medium;

- decoding read information;

- holding decoded information in a storage device so that the decoded information can be read therefrom and written therein repeatedly;

- sequentially reading out and outputting information in order of precedence at the time of writing the decoded information while writing the decoded information in a predetermined region of the storage device;

- designating a repetitive reproduction start position;

- setting a repetition reproduction range that would include the decoded information to be reproduced at one repetition reproduction when the start position of repetitive reproduction is designated;

- maintaining the decoded information in the repetition reproduction range when the start position of repetitive reproduction is designated;

- providing an instruction to begin to perform repetitive reproduction;

- outputting the decoded information in the repetition reproduction range when the instruction is provided; and

acquiring the decoded information subsequent to the repetition reproduction range when the instruction is provided.

6. The information reproduction method according to claim 5, wherein the method further comprising the process of using an area except the repetition reproduction range for reading and writing area of the decoded information when the repetitive reproduction start position is designated, and

the process of setting the repetition reproduction range sets a range from a target position on the storage device, from which the decoded information is read at the time when the start position is designated, as the repetition reproduction range, when the repetitive reproduction start position is designated,

the process of outputting the decoded information in the repetition reproduction range begins to read out the decoded information from the target position on the storage device to an end of the repetition reproduction range, when the instruction is provided,

the process of acquiring the decoded information subsequent to the repetition reproduction range includes the processes of: reading the information; decoding the read information; and writing the decoded information in the area except the repetition reproduction range.

7. The information reproduction method according to claim 5, wherein the process of setting the repetition reproduction range sets the size of the repetition reproduction range so that

both reading information corresponding to the decoded information subsequent to the repetition reproduction range and decoding the read information can be completed while the decoded information in the repetition reproduction range is outputted.

8. The information reproduction method according to claim 5, wherein

the information recorded on the information storage medium is video compression information that includes first image information for intra-frame encoding and second image information for performing forward and backward prediction, and

the method further comprising the process of maintaining both the decoded information that corresponds to one processing unit of the video compression information and the decoded information that corresponds to the second image information immediately before the first image information that is first appeared in a processing unit subsequent to the one processing unit, as decoded information in the repetition reproduction range, when the repetition reproduction range is set.